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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,339	06/11/2001	Kenneth H. Abbott	294438022US3	6518

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EXAMINER

HAILU, TADESSE

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 03/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/879,339

Applicant(s)

ABBOTT ET AL.

Examiner

Tadesse Hailu

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 72-75 and 82-138 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 72-75 and 82-138 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

1. This Office Action is in response to the Pre-Amendment entered June 11, 2001 for the patent application number 09/879,339 filed on June 11, 2001.
2. The present patent application claims priority from US Application number 09/216,193 filed December 18, 1998.
3. The submitted Information Disclosure Statements are considered and entered into the file folder.
4. The submitted Drawings entered August 2, 2001 are considered and will be reviewed by the Draftsperson's Patent Drawing Review (PTO-948).
5. The pending claims 72-75 and 82-138 are examined as follows.

Double Patenting

6. Claims 72-75 and 82-138 of this application conflict with claim 62-71 and 76-147 of Application No. 09/878,948. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.
7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and

useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

8. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claims 72-75 and 82-138 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 62-71 and 76-147 of copending Application No. 09/878,948. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 72-75, 97-115, 117-119, 121-138 are rejected under 35 U.S.C. 102(a) as being anticipated by John Bates, et al., "Middleware Support for Mobile Multimedia Applications," (1997).

With regard to claim 72:

Bates et al discloses a Middleware Support for Mobile Multimedia Applications. One of the middleware services offered is a trader. A trader is used to locate objects in an environment (see fig. 1, and section 5.2). The middleware support enables applications to follow mobile users as they move. The mobile user may carry a portable computer with built-in wireless network. Bates further provides a method in this mobile device for providing information about a context of the user that is modeled with multiple context attributes, such as, nearest electronic equipment to the user, location of the user, etc (see section 2.4). Bates also describes the trader receives a request from a client application. The request may include interest in receiving notification when a specified event that is related to at least one of the context attributes occurs (Bates, section 2.2). Bates also describes monitoring (section 2.3) for complex occurrence of information related to the at least one context attributes for an indication of an occurrence of the specified event, such monitoring for example includes to inform or notify the user (David) when his friend (John) enters his room (sections 1.1 and 2.2, Figs. 4, 5).

With regard to claim 73:

As per "... the monitored activities of the module include supplying of values of state attributes from others, and wherein the determined event is related to availability of a value of at least one state attribute." (see Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 74:

As per "... the event is availability of a source for supplying values of a first state attribute." (see Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 75:

As per "... the state attributes represent information about a user of the computer." (see Bates, sections 2.2 and 2.3).

With regard to claim 97:

Bates discloses a method in a computer for providing information about a current state of the mobile user that is modeled with multiple state attributes, such as nearby devices to the user and location of the user (Bates, sections 2.2, 2.3, Fig. 2); the method includes receiving from a client module or user a request to receive notification when a specified type of occurrence related to at least one of the multiple state attributes is detected, for example such occurrence event includes Davis may want to be notified when John moves (condition satisfied) to his room or to another room (Bates, sections 1.1-2.4, Fig. 2);

With regard to claim 98:

As per "The method of claim 97 wherein the detecting of the occurrence includes monitoring received information." (Bates, sections 2.2 and 2.3; Fig. 2).

With regard to claim 99:

As per "The method of claim 97 wherein the detecting of the occurrence includes detecting changes in the modeling of the current state." (Bates, sections 2.2 and 2.3; Fig. 2);

With regard to claim 100:

As per "The method of claim 97 wherein the determined type of occurrence is satisfaction of a condition related to a value of at least one of the state attributes, and wherein the detecting of the occurrence includes analyzing changes in the values of the at least one state attributes in order to determine when the condition is satisfied." (Bates, sections 1.1-2.4, Fig. 2).

With regard to claim 101:

As per “The method of claim 97 wherein at least one of the determined modules is a source of values for at least one of the state attributes.” (Bates, sections 2.2 and 2.3; Fig. 2).

With regard to claim 102:

As per “The method of claim 97 wherein the at least one of the determined modules is a consumer of values for at least one of the state attributes.” (Bates, sections 2.4, 5.2, Fig. 2).

With regard to claim 103:

As per “The method of claim 97 wherein the determined type of occurrence is a change in a value of a determined state attribute.” (Bates, sections 2.2-2.3).

With regard to claim 104:

As per “the method of claim 97 wherein the determined type of occurrence includes a source becoming available to supply values for a determined state attribute.” (Bates, sections 2.2-2.3).

With regard to claim 105:

As per “The method of claim 97 wherein the determined type of attribute that satisfies a occurrence includes availability of a value of a determined state attribute determined criteria.” (Bates, sections 1.1-2.3).

With regard to claim 106:

As per “The method of claim 97 wherein the determined type of occurrence includes a determined source becoming available to supply state attribute values, and wherein the detecting includes determining that the determined source is currently able to supply state attribute values.” (Bates, sections 2.2 and 2.5).

With regard to claim 107:

As per “The method of claim 97 wherein the determined type of occurrence includes a determined client becoming available to receive state attribute values.” (Bates, sections 2.2 and 2.5).

With regard to claim 108:

As per “The method of claim 97 wherein the determined type of occurrence includes at least one client expressing art interest in receiving values of a determined state attribute.” (Bates, section 2.4).

With regard to claim 109:

As per “the method of claim 97 wherein the computer has access to various devices, and wherein the determined type of occurrence includes a value of one of the state attributes indicating that access to a determined device has become available.” (Bates, sections 2.2-2.3).

With regard to claim 110:

As per “The method of claim 97 wherein the determined type of occurrence includes access to a determined group of themed attributes becoming available.” (Bates, sections 2.2-2.3).

With regard to claim 111:

As per “The method of claim 97 wherein the providing of the information about the current state is performed by a characterization module, and wherein the determined type of occurrence includes a value of one of the state attributes indicating that access to determined other functionality provided by the characterization module has become available.” (Bates, sections 4.2 and 5.2-5.3, Fig. 1).

With regard to claim 112:

As per “The method of claim 111 wherein the other functionality is a determined mediator.” (Bates, sections 4.2 and 5.2-5.3, Fig. 1).

With regard to claim 113:

As per “The method of claim 97 wherein the determining of the type of occurrence includes determining a number of times that the notifying of the determined modules is to occur.” (Bates, sections 1.1-2.2 and 4.2).

With regard to claim 114:

As per “The method of claim 97 wherein the determining of the type of occurrence includes determining times during which the notifying of the determined modules is to occur.” (Bates, sections 1.1-2.2 and 4.2).

With regard to claim 115:

As per “The method of claim 97 wherein the state attributes represent information about a user of the computer.” (Bates, section 1.1).

With regard to claim 117:

As per “the method of claim 97 wherein the state attributes represent information about the computer.” (Bates, sections 1.1-2.2 and 4.2).

With regard to claim 118:

As per “The method of claim 97 wherein the state attributes represent information about a physical environment.” (Bates, Figs. 1-6).

With regard to claim 119:

As per “The method of claim 97 wherein the state attributes represent information about a cyber-environment of a user of the computer.” (Bates, section 5.3).

With regard to claim 121:

As per “The method of claim 97 wherein the notifying of a module of a detected occurrence prompts the module to present information to a user of the module.” (Bates, section 5.3 and 6.2).

With regard to claim 122:

As per “The method of claim 97 wherein the notifying of a module of a detected occurrence includes supplying information about the detected occurrence.” (Bates, section 1.3).

With regard to claim 123:

As per “the method of claim 97 wherein the determining of the type of occurrence includes determining an event whose occurrences are occurrences of the determined type.” (Bates, sections 1.1-2.2).

With regard to claim 124:

Bates discloses a computing device for providing information about a current state of the mobile user that is represented with multiple attributes, including user's location and nearby electronic devices. Bates further includes a Middleware service (trader), a request receiver component that is capable of receiving from a client application (module) a request to receive notification when a specified type of occurrence related to at least one of the multiple state attributes is detected (Bates, sections 2.2, and 2.3); and the Middleware service (trader) also includes a notifier component that is capable of, after the receiving of the request, detecting an occurrence of the specified type and notifying the module of the detected occurrence (Bates, sections 2.2, and 2.3, Fig. 1).

With regard to claim 125:

As per “the computer-readable medium of claim 124 wherein the computer-readable medium is a memory of the computing device.” (Bates, Fig. 1).

With regard to claim 126:

As per “The computer-readable medium of claim 124 wherein the computer-readable medium is a data transmission medium transmitting a generated data signal containing the contents.” (Bates, section 6.3).

With regard to claim 127:

The claim is a computing device claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 128:

As per “the computing device of claim 127 wherein the analysis component, the detection component and the notifier component are part of an intermediary module executing in memory of the computing device.” (Bates, section 2.2).

With regard to claim 129:

As per “the computing device of claim 127 comprising multiple sources and multiple clients executing in memory of the computing device.” (Bates, sections, 5-2-5.3; Figs. 5 and 6).

With regard to claim 130:

The claim is a computing device claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 131:

The claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 132:

As per “The method of claim 131 wherein the context attributes represent information about a user of the portable computer.” (Bates, sections 1.1, 2.2, Figs. 4 and 5).

With regard to claim 133:

As per “The method of claim 131 wherein the context that is represented is a current context.” (Bates, section 1.1, Fig. 5).

With regard to claim 134:

As per “The method of claim 131 wherein at least one of the determined types of events is availability of a source for supplying values of a specified context attribute.” (Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 135:

As per “The method of claim 131 wherein at least one of the determined types of events is availability of a specified source for supplying values of at least one context attribute.” (Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 136:

As per “The method of claim 131 wherein receiving of the notifications by the modules prompts the modules to present information to users.” (Bates, section 2.24).

With regard to claim 137:

Independent claim 137 corresponds generally to independent claim 131 and recites similar features in storage medium form, and therefore is rejected under the same rationale.

With regard to claim 138:

The claim corresponds to claim 72, thus, is rejected under the same reasons given to the rejection of claim 72:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 116 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over John Bates, et al., "Middleware Support for Mobile Multimedia Applications," (1997) in view of Schmidt, et al., "There is more to context than location," (November 1998).

While Bates discloses information reflecting the physical location of a target user and a nearest electronic device to a target user, Bates does not show information reflecting a modeled mental state of the user, and the state attributes representing current predictions about a future state. However, Schmidt et al discloses a plurality of sensory devices attached to a computer including, among others, a sensor to reflect the mental state of the user (Fig. 1, section 3.1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate Schmidt's sensory devices with Bates because incorporating a plurality of sensory devices will be advantageous for a better understanding, modeling or representing of the user of the device or the device.

Allowable Subject Matter

12. Claims 82-96 are allowed:

The following is an examiner's statement of reasons for allowance:

These claims recite a method in a wearable computing environment for providing information about a current state of a user of the wearable computer. While the prior art of records recite a method in a computing environment for providing information about a state of, among others states, a computer, and a user of the computer. But the prior art of records does not explicitly describe the claimed component modules and the combined functional steps performed by these component modules under a wearable computer environment. Thus, the prior art of records does not anticipate or render claims 82-92.


Conclusion

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (703) 306-2799. The Examiner can normally be reached on M-F from 10:00 - 6:30 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116 Art Unit 2173 CPK 2-4A51.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Tadesse Hailu

March 3, 2004



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100